

CLAIMS:

We claim:

5 1. a method for providing a telephone number of a calling party to a called party for calls being handled at a call center, said method comprising the steps of:

receiving a first call set-up message in a switching system to set-up an incoming call to a terminal in said call center;

extending said incoming from said switching system to said terminal;

10 receiving a request in said switching system from said terminal to set-up an outgoing call to a called party;

generating a second call set-up message including an identification of said calling party; and

transmitting said call set-up message to said called party.

15 2. The method of claim 1 further comprising the steps of:

transmitting a request from said switching system for said identity of said calling party; and

20 receiving a response to said request including said identity of said calling party in said switching system.

3. The method of claim 2 further comprising the step of:

receiving said request for said identity of said calling party in said terminal; and

25 transmitting said identity of said calling party to said switching system in response to receiving said request.

4. The method of claim 2 further comprising the steps of:

receiving said request for said identity in a call controller; and

30 transmitting a response including said identity of said calling party from said call controller to said switching system.

5. The method of claim 4 further comprising the step of:  
transmitting an identification request for said identification of said calling party  
from said call controller to said terminal responsive to receiving said request from said  
5 switching system.

6. The method of claim 5 further comprising the step of:  
receiving said identification response including said identification of said calling  
party from said terminal responsive to said identification request.

7. The method of claim 5 further comprising the steps of:  
receiving said identity request from said call controller in said terminal;  
generating an identification response; and  
transmitting said identification response to said call controller.

8. The method of claim 1 further comprising the steps of:  
transmitting an available terminal request from said switching system to said call  
controller to request an available terminal to handle said incoming call; and  
receiving an identification of said terminal in said switching system from said call  
20 controller responsive to receiving said request.

9. The method of claim 1 further comprising the step of:  
receiving said incoming call in said terminal.

10. The method of claim 9 further comprising the step of:  
receiving an identification of said called party of said outgoing call in said  
terminal; and  
transmitting said call set-up request to said switching system responsive to  
receiving said identification of said called party.

11. A call center that provides a called party with an identification of a calling party for telephone communications that are relayed through said call center comprising:

a switching system;

a terminal connected to said switching system;

a processing unit in said switching system;

instructions for directing said processing unit in said switching system to:

receive a first call set-up message requesting an incoming call be extended to a terminal in said call center;

extend said incoming call to said terminal;

receive a request from said terminal to set-up an outgoing call to a called party;

generate a second call set-up message including an identification of said calling party;

transmit said call set-up message to said called party; and

a media readable by said processing unit in said switching system that stores said instructions.

12. The call center of claim 11 wherein said instructions for directing said processing unit in said switching system comprise:

instructions for directing said processing unit in said switching system to:

transmit a request for said identity of said calling party; and

receive a response to said request including said identity of said calling party.

13. The call center of claim 12 further comprising:

a processing unit in said terminal;

instructions for directing said processing unit in said terminal to:

receive said request for said identity of said calling party; and

transmit said identity of said calling party to said switching system in response to receiving said request; and

a storage media that is readable by said processing unit in said terminal for storing said instructions.

14. The call center of claim 12 further comprising:

5 a call controller connected to said switching system and said terminal;

a processing unit in said call controller;

instructions for directing said processing unit in said call controller to:

receive said request for said identity; and

transmit a response including said identity of said calling party to said

10 switching system; and

a storage media readable by said processing unit in said call controller for storing said instructions.

15. The call center of claim 14 wherein said instructions for directing said processing unit in said call controller further comprise:

instructions for directing said call controller to:

transmit an identification request for said identification of said calling party to said terminal responsive to receiving said request from said switching system.

16. The call center of claim 15 said instructions for directing said call controller further comprise:

instructions for directing said processing unit in said call controller to:

25 receive an identification response including said identification of said calling party from said terminal responsive to a transmission of said identification request.

17. The call center of claim 15 further comprising:

a processing unit in said terminal;

instructions for directing said processing unit in said terminal to:

30 receive said identity request from said call controller;

generate an identification response, and  
transmit said identification response to said call controller; and  
a storage media readable by said processing unit in said terminal.

5        18. The call center of claim 1 wherein said instructions for directing said  
processing unit in said switching system further comprise:

instructions for directing said processing in said switching system to:

transmit an available terminal request to said call controller to request an  
available terminal to handle said incoming call; and

10        receive an identification of said terminal from said call controller.

19. The call center of claim 11 further comprising:

a processing unit in said terminal;

instructions for directing said processing unit in said terminal to:

15        receive said incoming call.

20. The call center of claim 19 wherein said instructions for directing said  
processing unit in said terminal further comprise:

instructions for directing said processing unit in said terminal to:

20        receive an identification of said called party of said outgoing call; and

transmit said call set-up request to said switching system responsive to  
receiving said identification of said called party.

25        21. A switching system in a call center providing relay services between a calling  
party and a called party that provides an identification of said calling party in a call set-up  
message transmitted to said called party responsive to said calling party calling said  
called party through said call center, said switching system comprising:

a processing unit;

instructions for directing said processing unit to:

5 receive a first call set-up message requesting an incoming call be extended  
to a terminal in said call center;  
extend said incoming call to said terminal;  
receive a request from said terminal to set-up an outgoing call to a called  
party;  
generate a second call set-up message including an identification of said  
calling party; and  
transmit said call set-up message to said called party; and  
a media readable by said processing unit in said switching system that  
stores said instructions.

22. The switching system of claim 21 wherein said instructions for directing said  
processing unit in said switching system comprise:  
instructions for directing said processing unit in said switching system to:  
transmit a request for said identity of said calling party; and  
receive a response to said request including said identity of said calling  
party.

23. The switching system of claim 23 wherein said request is transmitted to said  
terminal.

24. The switching system of claim 22 wherein said request is transmitted to said  
call controller.

25. The switching system of claim 21 wherein said instructions for directing said  
processing unit in said switching system further comprise:

instructions for directing said processing unit to:  
transmit an available terminal request to said call controller to request an  
available terminal to handle said incoming call; and  
receive an identification of said terminal from said call controller.

26. A method of operating a switching system for providing an identification of a calling party to a called party for a telephonic connection that takes place through a call center, said method comprising the steps of:

5 receiving a first call set-up message requesting an incoming call be extended to a terminal in said call center;  
extending said incoming call to said terminal;  
receiving a request from said terminal to set-up an outgoing call to a called party;  
generating a second call set-up message including an identification of said calling  
10 party; and  
transmitting said call set-up message to said called party.

27. The method of claim 26 further comprising the steps of:

transmitting a request for said identity of said calling party; and  
15 receiving a response to said request including said identity of said calling party.

28. The method of claim 27 wherein said request is transmitted to said terminal.

29. The method of claim 27 wherein said request is transmitted to said call  
20 controller.

30. The method of claim 26 further comprising the steps of:  
transmitting an available terminal request to said call controller to request an  
available terminal to handle said incoming call; and  
25 receiving an identification of said terminal from said call controller.

31. A terminal in a call center that provides an identification of a calling party to a called party for telecommunications that are relayed through said call center, said terminal comprising:

30 a telephone set;

a processing unit;  
instructions for directing said processing unit to:  
receive an incoming call;  
receive an identification of said called party of said outgoing call in said  
5 terminal;  
transmit said call set-up request to said switching system responsive to  
receiving said identification of said called party; and  
transmit said identification of said calling party to said switching system;  
and  
10 a media readable by said processing unit to store said instructions.

32. The terminal of claim 31 wherein said instructions to transmit said  
identification comprise:

instructions for directing said processing unit in said terminal to:  
15 receive a request for said identity of said calling party from said switching  
system; and  
transmit said identity of said calling party to said switching system in  
response to receiving said request.

33. The terminal of claim 31 wherein said instructions for directing said  
processing unit in said terminal comprise:

instructions for directing said processing unit in said terminal to:  
receive a request for said identity of said calling party from said call  
controller; and  
25 transmit said identity of said calling party to said call controller in  
response to receiving said request.

34. A method for operating a terminal in a call center that provides an  
identification of a calling party to a called party for relay services provided by said call  
30 center, said method comprising the steps of:



receiving an incoming call;  
receiving an identification of said called party of said outgoing call in said terminal;  
transmitting said call set-up request to said switching system responsive to  
5 receiving said identification of said called party; and  
transmitting said identification of said calling party to said switching system.

35. The method of claim 34 further comprising the steps of:

receiving a request for said identity of said calling party from said switching  
10 system; and  
transmitting said identity of said calling party to said switching system in  
response to receiving said request.

36. The method of claim 34 further comprising the steps of:

15 receiving a request for said identity of said calling party from said call controller;  
and  
transmitting said identity of said calling party to said call controller in response to  
receiving said request.

20 ~~37.~~ A call controller for a call center that provides an identification of a calling  
party to a called party of outgoing telephone calls in a relay service, said call controller  
comprising:

a processing unit;

instructions for directing said processing unit to:

25 receive said request for an identity for an incoming call from said  
switching system; and

transmit a response including said identity of said calling party to said  
switching system; and

a storage media readable by said processing unit for storing said  
30 instructions.

38. The call center of claim 14 wherein said instructions for directing said processing unit in said call controller further comprise:

instructions for directing said call controller to:

5           transmit an identification request for said identification of said calling party to said terminal responsive to receiving said request from said switching system.

39. The call center of claim 38 said instructions for directing said call controller further comprise:

10           instructions for directing said processing unit in said call controller to:

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          receive an identification response including said identification of said calling party from said terminal responsive to a transmission of said identification request.

15           40. A method for operating a call controller of a call center to provide an identification of a calling party in an outgoing call to a called party comprising the steps of:

          receiving a request for an identity for an incoming call from said switching system; and

20           transmitting a response including said identity of said calling party to said switching system.

41. The method of claim 40 further comprising the step of:

25           transmitting an identification request for said identification of said calling party to said terminal responsive to receiving said request from said switching system.

42. The method of claim 41 further comprising the step of:

          receiving an identification response including said identification of said calling party from said terminal responsive to a transmission of said identification request.